

CONCORDIA UNIVERSITY

Council of the Faculty of Engineering and Computer Science

Minutes of Meeting 2005-01

held

Friday, February 18, 2005, 2:00 p.m., H-769

Present:	N. Esmail (<i>Chair</i>) M.O. Ahmad S.T. Alkass J. Beaudoin (for N. Howe) S. Bergler R. Bhat J. Covey M. Di Pietrantonio (Secretary of Council) R. Dssouli	T. Fancott T. Fevens W. Ghaly L. Harris I. Hassan S.V. Hoa F. Khendek C. Lam E. Levi A. Lew H.F. Li	W.E. Lynch B. Mackenzie S. Mudur C. Paradisis M.D. Pugh L. Quesnel A. Ramamurthy Y.R. Shayan M.R. Soleymani C.W. Trueman M. Zaheeruddin
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Observers:	G. Gignac	S. Horn (for L. Zack)	R. Melkonian
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Regrets:	B. Ashtakala M. Debbabi K. Demirli S. Ghaderpanah	M.R. Hajiboli J. Jasinski Q. Li	A. Limoges R. Mizouni R.G. Zmeureanu
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1. Adoption of Agenda

Amendment: Interchange the order in which Items 6 and 7 are presented on the Agenda of February 9, 2005.

Rationale: The recommendation to rename the General Engineering and Computer Science (GENCS) Studies Unit as the General Studies Unit (GSU) (Item 7), needs to be approved by Council members before it can be included in ECFC Document 2005-01-03 (Item 6).

*Motion
2005-01-01* ***That the Agenda be adopted, as amended (R. Dssouli, M.O. Ahmad)***

Vote: Carried unanimously

2. Adoption of the Minutes of Meeting 2004-08

Include the name of Dr. C.W. Trueman to the list of faculty members who were present at Meeting 2004-08 (November 12, 2004).

*Motion
2005-01-02* *That the Minutes of Meeting 2004-08 (November 12, 2004) be adopted,
as corrected (C. Lam, I. Hassan)*

Vote: Carried unanimously

3. Chair's Remarks

Faculty Budget: The Chairman referred to his memo of February 4, 2005 sent to all faculty and staff members, which depicts a new phenomenon in the Faculty's enrollment and finances; namely a reduction in the budget of \$2.5 million, resulting from a drop in the Faculty's FTE's (see document on *Enrollment Financed FTE's* distributed at Meeting 2005-01).

The \$2.5 million reduction in the faculty budget is considered substantial, especially given the fact that it has resulted over a one-year period. Although the Faculty has experienced spectacular growth over the last seven years, continuous drops of this magnitude over prolonged periods of time will force the Faculty to re-examine the size it assumes; notwithstanding fluctuations in the budget, enrollment, and other faculty parameters. Having established itself at approximately 4,185 unweighted FTE's, and a complement of 147 full-time professors, the Faculty can sustain a viable financial and academic operation by maintaining FTE's ranging from 3,500 to 3,600.

The number of registered Master Research students in the Faculty declined by 12, from 784 in 2003/04 to 772 in 2004/05—representing a decrease of less than 2%. The financed FTE's among these students declined from 385 in 2003/04 to 321 in 2004/05—a 20% decrease that has cost the Faculty a reduction in the budget of \$1.2 million. Therefore, the loss of \$1.2 million reflects a reduction of Master Research financing, even though the Faculty appears to have retained almost the same number of students (only 12 less).

After analyzing this situation, the Faculty discovered that decreases of similar magnitude in undergraduate enrollment in engineering programs have occurred across the country, with drops occurring mainly in computer science and computer engineering. In fact, enrollment in civil, building, mechanical, and industrial engineering has increased, but not to the degree required to compensate for the drop in computer science and computer engineering resulting from uncontrollable factors, such as societal and market decline. According to the Chairman, the Faculty needs to respond to this trend by increasing its effort to promote the quality of ENCS programs, and remain competitive in Montreal, Quebec, and beyond, in order to attract a fair share of engineering FTE's.

Although PhD enrollment increased by 15%, this has not compensated for the decrease in Master Research students.

Recently, the Chairman asked for a survey on graduate students supervised by each faculty member and the duration of their residence in the programs. According to the survey results, almost one-third or more of all Master Research students are not financed students. It should be recognized that government funding only supports one and a half years for a 45-credit M.A.Sc. program, and three years for the PhD program. Therefore, students staying beyond the financing period are drawing resources ranging from a supervisor's time to faculty infrastructure (i.e. desk space), to many other services, without compensation from the Government of Quebec. In fact, they are sharing the meager resources that the financed undergraduate and graduate students are bringing to the Faculty. The reason for this phenomenon occurring this year is that the last step increase in the number of our Master Research students happened two years prior to this academic year.

Therefore, the financial fallout was not caused by a decrease in enrollment in Master Research students, but rather due to the fact that so many unfinanced students are kept in the system at an expense of \$1.2 million. Although the Faculty may contend that the quality and necessity of its program depends on extending Master Research studies to three, and possibly four years, the government will not absorb the cost of students who overstay beyond their financing period, and overstretch faculty resources.

If a consensus is reached for the ENCS Master Research program to extend beyond two years, the Faculty will have to assess how it will fund for this. Although many options are available, an obvious solution would be to reduce the size of the Faculty complement.

The Chairman expressed concern in terms of the impending multi-million dollar reduction to occur in the budget (perhaps in two years), once the current annual increases in PhD students level off, and a bulk number stays in their fourth year.

Although some administrative decisions need to be made in order to control the duration of the ENCS master and research graduate programs, the Chairman announced that the Faculty cannot discontinue its Support for Research Thesis (SRT) program without decreasing the number of ENCS students in the Faculty. The Faculty will continue to provide the same level of support to the Teaching Fellowship Program initiated this year, as well as the 15% external industrial funding brought to the Faculty. It has, however, taken a first step to remedy the decrease in the budget by planning to reduce the hiring of new faculty members from 25 to 12.

A discussion ensued amongst Council members regarding the different aspects of graduate programs:

- timeline of completion for the M.A.Sc. program
- funding of the Master Research thesis
- statistics comparing national average of Ph.D. and Master students

Dr. Hassan suggested that the Office of the Dean release funds for student support only once the supervisor has submitted a clear proposal outlining details of the Master or doctoral research to be undertaken.

According to the Chairman, this is not an administrative (monetary) issue, but rather one which concerns a community of scholars involving the level of power exercised by the Graduate Program Director. In this regard, Peer Committees have to play a larger role in improving the quality of graduate programs.

Accreditation: The Chairman stated that accreditation is an important necessity in academic life. The Faculty received CEAB's preliminary report of the October 2004 accreditation visit to the Software Engineering Program. As the comments in the visiting team's report are excellent, the Chairman is confident that ENCS is in good standing with regards to SOEN's accreditation. Associate Dean Lynch will be responding to this report by providing information on constructive actions planned and taken in response to identified issues, and by correcting any facts or outlining changes made since the date of the visit. A final decision will be rendered at CEAB's accreditation decision meeting in June 2005.

It is hoped the outcome will be just as positive for the Faculty's six undergraduate programs to be accredited next fall. Professor Christopher Watts, Associate Dean of Engineering at Dalhousie University, has been appointed Chair of the Visiting Team. CEAB's Fall 2005 visit has been tentatively scheduled for October 23, 24, and 25, 2005. The Chair requested that the Faculty's Administrative Officers, including Associate Deans, Department Chairs, and Program Directors, refrain from making any travel plans during this period.

National Engineering Week: The Chairman announced that the 2005 National Engineering Week will be held from February 28 to March 4, 2005. A strong participation of faculty members in support of the engineering profession and ENCS students alike was encouraged. In this regard, the Chairman advised Council members to allow students to leave 5 minutes before the end of class so that they may participate in the various events scheduled during National Engineering Week. The Chairman will e-mail this message to all faculty members once the schedule of activities is confirmed by the ECA president.

4. University Writing Test for Faculty of ENCS (ECFC Document 2005-01-01)

Dr. Lynch moved ECFC Document 2005-01-01, which addresses the problems surrounding the UWT in the Faculty of ENCS. This document was passed with some alterations by APC on January 20, 2005. APC's alterations were mainly editorial in nature, with the exception that *in addition to the new ways to satisfy the UWT, the old ways should also be preserved.*

In an effort to improve the written communication skills of its students, the Faculty adopted in the 2001/02 Calendar a requirement stipulating that all ENCS students were to fulfill a University Writing Skills Requirement (UWSR) which could be

satisfied by either passing the University Writing Test (UWT), or by passing ENGL 212 with a C- or better. (A UWT and course in French are available for those who wish to satisfy the UWSR in that language). Depending on the scores received on the UWT and two other tests that the University administers in this area, a student may be asked to take a sequence of six courses culminating with ENGL 212. These courses, if taken in the regular fall and winter terms, would take three academic years to complete. Due to requirements of the Canadian Engineering Accreditation Board (CEAB), none of these courses may count toward a student's degree—a burdensome requirement to fulfill.

The rest of the University followed the Faculty's lead in 2002/03 by requiring all undergraduate students to meet a substantially similar requirement (i.e. Journalism students take an alternative course to ENGL 212). Since that time, the Faculty has come to realize that these changes were not appropriate for our students, and were not the best way to improve student-writing skills.

In fact, both the mechanics and the format of the UWT are incompatible with the educational requirements of a technical professional. The UWT is a handwritten exam (no dictionaries allowed), and an essay is required. Nowadays, essentially all writing by technical professionals is done on a computer, with a word processor that has a spell checker. Essays by technical professionals are extremely rare, whereas, for example, precise descriptions and balanced analysis is more common.

Moreover, to improve writing skills, one must have an educational component for students who require it, which does not threaten the educational component of their regular program of studies. It makes sense that this educational component be targeted at the kind of writing students will need in their post-university professional life. A test to allow qualified students to bypass this educational component is also desirable.

To this end, the Faculty is introducing a new course, ENCS 272 *Composition and Argumentation for Engineers*, focusing on the type of writing engineers and computer scientists use in their professional lives, as opposed to the essay writing which is the focus of the six-course stream culminating in ENGL 212. Engineering and Computer Science students who obtain a C- in ENCS 272, or who successfully complete a challenge exam in that course, will be deemed to have satisfied the UWSR.

One problem with the current UWSR regime is that there is nothing a student cannot do if they have not completed the UWSR, except graduate. Some students, for whatever reason, leave this requirement to the end of the undergraduate education, and then suddenly find themselves having to do one to six courses when they fail to pass the UWT. This is addressed in the current package by requiring students to satisfy the UWSR as a prerequisite for ENCS 282 *Technical Communication*—a core course in all of the Faculty's undergraduate programs.

The following change was proposed to ECFC Document 2005-01-01:

- Delete the first sentence in the Rationale box on Page 6 of the document

*Motion
2005-01-03 That the recommendation to adopt a single-track system to satisfy the University Writing Skills Requirement (UWSR), (which requires students to obtain a C- in ENCS 272, or successfully complete a challenge exam in that course), be approved by Council
(T. Fancott, R. Dssouli)*

Vote: Carried unanimously

5. **Definition/Essential Components of the M.A.Sc. Thesis in ENCS**
(ECFC Document 2005-01-02)

Dr. Bhat moved ECFC Document 2005-01-02, outlining the definition of a Master of Applied Science (M.A.Sc.) thesis in the Faculty of ENCS, in compliance with Faculty Council's recommendation made in the Meeting of November 5, 2004, for the ECSGSC to "provide parameters defining the nature of a research thesis in the master program (irrespective of the number of credits)."

Dr. Bhat advised that at this time, the document is for information purposes only. A workshop dedicated to discussing the duration of Master Research programs will be held on March 31, 2005. Dr. Bhat welcomed the submission of any comments, suggestions, or amendments pertaining to this document, for his review.

6. **Name Change for the General Engineering and Computer Science (GENCS) Studies Unit**

In an effort to shorten the name of the General Engineering and Computer Science (GENCS) Studies Unit, it was recommended to rename this academic unit as the General Studies Unit (GSU).

*Motion
2005-01-04 That the recommendation to change the name of the General Engineering and Computer Science (GENCS) Studies Unit to the General Studies Unit (GSU), be approved by Council (T. Fancott, C. Trueman)*

Vote: Carried unanimously

7. **Faculty Structure and Faculty Council** (ECFC Document 2005-01-03)

The Chairman advised Council members that ECFC Document 2005-01-03 constitutes an official document to be approved by the Board of Governors.

The following amendments were proposed to ECFC Document 2005-01-03:

- Add the word **Director** to the phrase: *The Chairs/Director of the Departments of:*
- For the word **Department**: change the letter D from upper to lower case to read *department*
- Delete the words **Director of** to read: *Concordia Institute for Information Systems Engineering*
- Add the phrase **with undergraduate programs** to read:
Four Undergraduate students, one from each department with undergraduate programs, nominated by the Engineering and Computer Science Students' Association, each for a one-year term

*Motion
2005-01-05*

That the proposed changes to the composition of the Council of the Faculty of Engineering and Computer Science, as set in ECFC Document 2005-01-03, be approved, with amendments (B. Lynch, C. Lami)

Vote: Carried unanimously

8.

Other Business:

The Chairman announced the election of two faculty members to **FELLOW** of The Engineering Institute of Canada, a distinction granted to a very small proportion of members in this society:

- Dr. Paul Fazio, Professor, Dept. of BCEE
- Dr. Hugh McQueen, Professor Emeritus, Dept. of MIE

The Chairman congratulated both professors for achieving this distinction. On behalf of the Faculty, he expressed pride and recognition for this well-deserved honor.

9.

Adjournment:

The meeting was adjourned at 3:30 p.m.


Mary Di Pietrantonio
Secretary of Council